ABSTRACT OF THE INVENTION

A method of diagnosing a subject by delivering ultrasound signals using shear waves includes applying a portion of an ultrasound mainbeam to a bone surface at an incident angle relative to the surface of the bone to induce shear waves in the bone, energy in the shear waves forming a substantial part of energy of first ultrasound waves at a desired region in the subject through the bone, detecting at least one of reflected and scattered energy of the applied ultrasound mainbeam, and analyzing the detected energy for a diagnostic purpose.

10

5

TRA 1872956v1